Technology: Optoelectronics

Qualified volume

High Power Devices, a New Jersey based manufacturer of high power IR and visible laser diodes and systems, qualified for registration to ISO 9001:2000 as of June 1, 2004 by SGS certification services. The certification compliments HPD's recent expansion, doubling the manufacturing area for large volumes.

All optical data

A joint industrial–academia team of Agility Communications, Calient Networks, Cisco Systems and JDS Uniphase, Stanford University and UC Santa Barbara is to develop all-optical data packet routers under a $6.3m DARPA award. The grant includes optional phases raising the total award to $15.8m.

R&D funds for photonic ICs

Canadian MetroPhotonics, developer of photonic ICs, has received a CDN$7.7m investment from Technology Partnerships Canada, a government agency that provides pre-commercialisation funding for R&D.

MetroPhotonics president & CEO David Clark said "Our vision is to continue integrating increasingly complex functions onto a single chip, thus offering further significant cost performance benefits to equipment manufacturers."

MetroPhotonics' SurePath portfolio simplifies optical system design and eliminates multiple components and fiber connections. MetroPhotonics' lead product, the SurePath Monitor, is currently shipping to on a controlled availability basis, with full commercial availability on completion of Telcordia qualifications.

Finisar takes Infineon's fibre optics

Finisar Corp is to buy the fibre optic business unit of Infineon Technologies AG for stock worth $232m, broadening Finisar's portfolio and bringing the company into new markets, including the automotive industry. Expected to close during the 3Q of 2004, the deal is for Finisar to issue 135m shares or a 38% stake to Infineon which becomes Finisar's largest shareholder.

Thomas Seifert, Infineon CEO of the wireline group, will join Finisar's board. The combined revenues for Finisair would be around $240m yearly putting the company on a par with Agilent Technologies (reputed to hold 14% of world markets).

Modulight

Modulight offers new laser products for CATV and other applications requiring analog signal transmission in optical fiber. Its ML-COAX-1310-FP-AL-3 is a 1310nm MQW FP diode laser based on a proprietary MOCVD and MBE grown epi structure which operates with 3mW out-of-fiber optical power with 40mA typical forward current. ML-COAX-1310-DFB-AL-3 - is a 1310 nm DFB diode laser on robust MQW core design. At 40 mA input current, the device has typical optical output power of 3mW similarly to its FP counterpart.

Alternative to short run outsourcing

New Wave Research has launched LaserMill, a benchtop, Nd:YAG laser micromilling machine suited for universities and industrial users conducting R&D, prototyping, pilot line development and short-run production. This features switchable wavelength operation for machining a variety of organic and inorganic materials in MEMS, biomedical, semiconductor, life science and other devices. Applications range from passivation and polyimide removal, lab-on-chip production to orifices and apertures.

A flexible and affordable alternative to outsourcing, the unit fits on most workbenches (18x30" footprint) saving time and money while protecting proprietary processes.

LaserMill is equipped with 100 x100 mm stages (standard), a high-magnification video microscope and continuously variable, rotating XY shutter that yields cut sizes down to nearly 1µm. Intuitive software allows operators to draw and machine holes and complex patterns or to import and run DXF CAD files. Users can adjust energy density at the sample up to 25J/cm^2 for total clean ablation and switch the laser output between 53 nm and 355 nm with one click. GUI controls are provided for all laser, sample imaging and positioning functions.

LaserMill is suited for universities and commercial users conducting R&D.